



Visualizing Complex Functions

Members

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Client: Dr. George Abdo



Dr. Abdo's visualization project site: <http://my.fit.edu/~gabdo/function.html>

Project Goals

Draw complex functions

Allow user to provide the function, method of drawing, shading choices, time parameter

Portable application on the web

Java Applet

HTML5

Interesting Factors

Visualizing the invisible (4 dimensions, imaginary numbers)

Animation based on changing parameters

Useful application for students learning complex functions

Technical Challenges

2D and 3D graphics libraries

Learning about complex functions and their visualization

Portability between web browsers and other OS's

Milestone 1

Research and select 2D and 3D graphics libraries

Research complex functions (Tristan Needham, *Visual Complex Analysis*)

Requirements Document

Design Document

Test Plan

Milestone 2

Set up website with applet and dummy GUI

Implement a simple function

Implement one drawing pattern

Milestone 3

Input field

Implement 3 more types of functions

Implement vertical stripes and horizontal stripes

Task matrix for Milestone 1

Task	Paul	Bradley	Branden
Research	Complex functions and their visualization	2D and 3D graphics libraries	Website
Requirements	25%	25%	50%
Design	25%	50%	25%
Test Plan	50%	25%	25%